

WHAT IS CLAIMED IS:

1. A method for enabling a network between a first processor and a second processor using at least one additional processor separate from the first processor and the second processor, the method comprising the steps of:
 - 5 receiving, at the at least one additional processor, information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor;
 - receiving, at the at least one additional processor, information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor;
 - 10 determining a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network; and
 - 15 providing, by the at least one additional processor, to each of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors.
2. The method of claim 1, further comprising the step of:
 - establishing, by the first processor, one or more tunnels to the second processor using the first and second virtual addresses.
3. The method of claim 2, wherein said step of establishing further comprises the step of:
 - establishing each of the one or more tunnels as an encrypted tunnel.

4. The method of claim 3, wherein said step of establishing each of the one or more tunnels further comprises the step of:

establishing each of the one or more tunnels as an encrypted tunnel that is encapsulated within a protocol.

5 5. The method of claim 3, wherein said step of establishing each of the one or more tunnels further comprises the step of:

establishing each of the one or more tunnels as an encrypted tunnel based on an Internet Protocol Security (IPSec) tunnel.

6. The method of claim 1, wherein said step of receiving, at the at least 10 one additional processor, information indicating a consent on behalf of the first processor, further comprises the step of:

receiving a name that identifies the second processor as consenting to enabling the one or more tunnels between the first and second processors.

7. The method of claim 1, wherein said step of receiving, at the at least 15 one additional processor, information indicating a consent on behalf of the first processor, further comprises the step of:

receiving, at the at least one additional processor, information indicating the consent on behalf of the first processor to enabling one or more other tunnels between the first processor and other processors separate from the at least one 20 additional processor and the second processor.

8. The method of claim 1, wherein said step of determining further comprises the step of:

selecting, at the at least one additional processor, each of the first and second virtual addresses from a predetermined address range.

9. The method of claim 8, wherein said step of selecting further comprises the step of:

5 defining each of the addresses in the predetermined address range as an address that is routable through the network when the network is enabled by the at least one additional processor.

10. A method for enabling a network between a first processor and a second processor using at least one additional processor separate from the first

10 processor and the second processor, the method comprising the steps of:

establishing a first tunnel between the first processor and the at least one additional processor;

establishing a second tunnel between the second processor and the at least one additional processor;

15 determining, at the least one additional processor, whether the first and second processors mutually consent to enable a third tunnel between the first and second processors;

determining a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses

20 uniquely identify the first and second processors, respectively, and are routable through the network; and

providing the first virtual address to the second processor through the second tunnel and the second virtual address to the first processor through the first tunnel

after the at least one additional processor determines that the first and second processor mutually consent to enabling the third tunnel.

11. The method of claim 10, wherein said step of determining, at the at least one additional processor, further comprises the step of:

5 receiving, at the at least one additional processor, a consent from each of the first and second processors independently of each other.

12. The method of claim 10, further comprising the step of:
establishing, by the first processor, the third tunnel to the second processor using the provided first and second virtual addresses.

10 13. The method of claim 12, wherein said step of establishing the third tunnel, further comprises the step of:

establishing, by the first processor, the third tunnel to the second processor through a firewall associated with the second processor.

14. The method of claim 12, wherein said step of establishing the third 15 tunnel, further comprises the step of:

establishing the third tunnel as an encrypted tunnel.

15. The method of claim 14, wherein said step of establishing the third tunnel as an encrypted tunnel further comprises:

20 establishing the third tunnel as an encrypted tunnel that is encapsulated within a protocol.

16. The method of claim 14, wherein said step of establishing the third tunnel as an encrypted tunnel further comprises the step of:

establishing the third tunnel as an encrypted tunnel based on an Internet Protocol Security (IPSec) based encrypted tunnel.

17. The method of claim 12, further comprising the step of:
 - excluding from the first and second tunnels information that flows from the second processor to the first processor through the established third tunnel.
18. The method of claim 12, further comprising the step of:
 - excluding from the first and second tunnels information that flows from the first processor to the second processor through the established third tunnel.
19. The method of claim 12, further comprising the step of:
 - 10 interfacing the first processor to one or more other processors separate from the first and second processors and the at least one additional processor such that information is routed to the one or more other processors from the second processor through the established third tunnel and the first processor.
20. The method of claim 12, further comprising the step of:
 - 15 interfacing the first processor to one or more other processors separate from the first and second processors and the at least one additional processors such that information is routed to the second processor from the one or more other processors through the first processor and the established third tunnel.
21. The method of claim 12, further comprising the steps of:
 - 20 providing, by the at least one additional processor, code and information that uniquely identifies the first processor in the network; and
 - executing the provided code on the first processor to configure, based on the provided information, the first processor as a gateway to one or more other

processors separate from the first and second processors and the at least one additional processor; and

routing, at the configured first processor, information from the one or more other processors through the established third tunnel to the second processor.

5 22. The method of claim 21, wherein the step of providing further comprises the step of:

providing the code and the information on one or more computer readable media.

10 23. The method of claim 22, wherein the step of providing further comprises the step of:

downloading the code and the information from the at least one additional processor.

15 24. The method of claim 10, further comprising:
receiving, from the first processor at the at least one additional processor, information indicating a consent on behalf of the first processor to enable the third tunnel to the second processor.

20 25. The method of claim 24 wherein said step of receiving, from the first processor further comprises the step of:

receiving a name that identifies the second processor as consenting to enabling the third tunnel between the first and second processors.

25 26. The method of claim 25, wherein said step of receiving the name further comprises the step of:

receiving the name from the first processor through the first tunnel.

27. The method of claim 10, further comprising the step of:
receiving, at the at least one additional processor, information indicating a
consent on behalf of the first processor to enable one or more other tunnels to other
processors separate from the at least one additional processor and the second
5 processor.

28. The method of claim 10, wherein said step of determining a first virtual
address further comprises the step of:
selecting, at the at least one additional processor, each of the first and second
virtual addresses from a predetermined address range.

10 29. The method of claim 28, wherein said step of selecting further
comprises the step of:
defining each of the addresses in the predetermined address range as an
address that is routable through the network when the network is enabled by the at
least one additional processor.

15 30. The method of claim 10, further comprising the step of:
providing, from the at least one additional processor and through the first
tunnel, information to a firewall that selectively restricts a flow of information into the
first processor such that information flowing from the second processor on the
enabled third tunnel is allowed by the firewall into the first processor.

20 31. The method of claim 10, further comprising the step of:
placing between the first processor and the second processor a firewall to
selectively restrict a flow of information into the first processor.

32. The method of claim 10, wherein said step of establishing the first tunnel further comprises the step of:

establishing the first tunnel through a proxy server placed between the first processor and the at least one additional processor.

5 33. The method of claim 10, further comprising the step of:

monitoring, at the at least one additional processor, the first and second processors through the first and second tunnels.

34. A system for enabling a network between a first processor and a second processor, wherein the first and second processors are separate from said 10 system, said system:

a tunneling interface that receives information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor, and receives information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor;

15 and

a controller that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network, and that provides to each of the first and second 20 processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors.

35. A computer program product for enabling a network between a first processor and a second processor using at least one additional processor separate from the first processor and the second processor, the computer program product comprising code, said code comprising:

5 code, at the at least one additional processor, that receives information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor, and receives information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor;

10 code that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network; and

15 code, at the at least one additional processor, that provides to each of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors.

36. A system for enabling a network between a first processor and a second processor, said system comprising:

at least one memory including

20 code that receives information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor and information indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor,

code that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network, and

5 code that provides to each of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors; and

at least one processor, separate from the first and second processors, that executes said code.

10 37. A system for enabling a network between a first processor and a second processor, wherein the first and second processors are separate from said system, said system:

a tunneling interface that establishes a first tunnel between the first processor and the at least one additional processor and establishes a second tunnel between

15 the second processor and the at least one additional processor;

a controller that determines whether the first and second processors mutually consent to enable a third tunnel between the first and second processors, determines that a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify

20 the first and second processors, respectively, and are routable through the enabled network, and provides the first virtual address to the second processor through the second tunnel and the second virtual address to the first processor through the first

tunnel after the controller determines that the first and second processor mutually consent to enabling the third tunnel.

38. A computer program product for enabling a network between a first processor and a second processor using at least one additional processor separate from the first processor and the second processor, the computer program product comprising code, said code comprising:

code that establishes a first tunnel between the first processor and the at least one additional processor and establishes a second tunnel between the second processor and the at least one additional processor;

10 code, at the least one additional processor, that determines whether the first and second processors mutually consent to enable a third tunnel between the first and second processors;

code that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual 15 addresses uniquely identify the first and second processors, respectively, and are routable through the network; and

code for providing the first virtual address to the second processor through the second tunnel and the second virtual address to the first processor through the first tunnel after the at least one additional processor determines that the first and second 20 processor mutually consent to enabling the third tunnel.

39. A system for enabling a network between a first processor and a second processor, said system comprising:

at least one memory including code comprising

code that establishes a first tunnel between the first processor and the

5 at least one additional processor and establishes a second tunnel between the second processor and the at least one additional processor,

code, at the least one additional processor, that determines whether the first and second processors mutually consent to enable a third tunnel between the first and second processor,

10 code that determines a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network, and

code that provides the first virtual address to the second processor

15 through the second tunnel and the second virtual address to the first processor through the first tunnel after the at least one additional processor determines that the first and second processor mutually consent to enabling the third tunnel; and

at least one processor, separate from the first and second processors, that executes said code.

20 40. A network comprising:

a first processor;

a second processor; and

at least one additional processor, separate from the first and second processors, wherein the at least one additional processor determines a first virtual address for the first processor and a second virtual address for the second processor such that one or more tunnels are enabled when the at least one additional processor determines that the first and second processors mutually consent to enabling the one or more tunnels between the first processor and the second processor and provides the second virtual address to the first processor and the first virtual address to the second processor to enable the one or more tunnels.

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41. The network of claim 40 further comprising:

10 a third processor, separate from the at least one additional processor and the second processor and placed between the first processor and the second processor such that the third processor selectively restricts into the first processor a flow of information on the enabled one or more tunnels.

42. The network of claim 40 further comprising:

15 one or more other processors, separate from the first and second processors and the at least one additional processors, that interface to the first processor such that information is routed to the second processor from the one or more other processors through the first processor.

43. A system for enabling a network between a first processor and a
20 second processor using at least one additional processor separate from the first processor and the second processor, the system comprising the steps of:

means for receiving, at the at least one additional processor, information indicating a consent on behalf of the first processor to enabling a tunnel between the first processor and the second processor;

means for receiving, at the at least one additional processor, information

5 indicating a consent on behalf of the second processor to enabling a tunnel between the second processor and the first processor;

means for determining a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are

10 routable through the network; and

means for providing, by the at least one additional processor, to each of the first and second processors the first and second virtual addresses to enable one or more tunnels between the first and the second processors.

44. A system for enabling a network between a first processor and a

15 second processor using at least one additional processor separate from the first processor and the second processor, the system comprising the steps of:

means for establishing a first tunnel between the first processor and the at least one additional processor;

means for establishing a second tunnel between the second processor and

20 the at least one additional processor;

means for determining, at the least one additional processor, whether the first and second processors mutually consent to enable a third tunnel between the first and second processors;

means for determining a first virtual address for the first processor and a second virtual address for the second processor such that the first and second virtual addresses uniquely identify the first and second processors, respectively, and are routable through the network; and

means for providing the first virtual address to the second processor through the second tunnel and the second virtual address to the first processor through the first tunnel after the at least one additional processor determines that the first and second processor mutually consent to enabling the third tunnel.